Contents, Vol. 30, 1993


Main Editor
M.J. Mulvany, Aarhus

Associate Editor
G.K. Owens, Charlottesville, Va.

Editorial Board
C. Aalkjær, Aarhus K.E. Andersson, Lund J.A. Angus, Prahran
E. Bassenge, Freiburg
B.C. Berk, Atlanta, Ga.
J.A. Bevan, Burlington, Vt.
H.G. Bohlen, Indianapolis, Ind.
G. Bondjers, Gothenburg
F.R. Bühler, Basel
G. Burnstock, London
R. Casteels, Leuven
E.E. Daniel, Hamilton
RF. Davies, Chicago, Ill.
P. DiCorleto, Cleveland, Ohio
F. Dieterlen-Lievre, Nogent-sur-Marne
G. Gabbanì, Genève
G. Gabella, London
M.A. Gimbrone, Boston, Mass.
R.J. Gryglewski, Cracow
D.R. Harder, Milwaukee, Wis.
C.-H. Heldin, Uppsala
P. Hellstrand, Lund
K. Hermsmeyer, Portland
A.D. Hughes, London
M. Klagsbrun, Boston, Mass.
P.I. Korner, Sydney
H. Kuriyama, Fukuoka
B.L. Langille, Toronto
S.E. Luff, Prahran
T. Maciag, Rockville, Md.
J.C. McGrath, Glasgow
R.P. Mecham, St. Louis, Mo.
R.A. Murphy, Charlottesville, Va.
O.A. Nedergaard, Odense
M.T. Nelson, Burlington, Vt.
E. Olson, Houston, Tex.
C. Owman, Lund
R.J. Paul, Cincinnati, Ohio
E.M. Renkin, Davis, Calif.
W. Risau, Planegg-Martinsried
G.M. Rubanyi, Berlin
J.C. Rüegg, Heidelberg
G.W. Schmid-Schönbein, La Jolla, Calif.
S.M. Schwartz, Seattle, Wash.
A.P. Somlyo, Charlottesville, Va.
M. Struyker-Boudier, Maastricht
C. VanBreemen, Miami, Fla.
P.M. Vanhoutte, Houston, Tex.
L.T. Williams, San Francisco, Calif.

KARGER

S. Karger

Medical and Scientific Publishers Basel · Freiburg · Paris · London New York · New Delhi · Bangkok Singapore · Tokyo · Sydney

Drug Dosage

The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.

No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher or, in the case of photocopying, direct payment of a specified fee to the Copyright Clearance Center (see 'Information for Readers and Subscribers').

© Copyright 1993 by S. Karger AG, P.O. Box, CH-4009 Basel (Switzerland) Printed in Switzerland on acid-free paper by Thür AG Offsetdruck, Pratteln

Contents Vol. 30, 1993

No. 1

Editorial
Mulvany, M.J.; Owens, G.K.

Research Papers

Vascular Pharmacology of ATP-Sensitive K⁺ Channels:
Interactions between Glyburide and K⁺ Channel Openers Meisheri, K.D.; Khan, S.A.; Martin, J.L.
Effect of Experimental Hypertension on Phosphoinositide Hydrolysis and Proto-Oncogene Expression in Cardiovascular
Tissues
Dose-Related Changes in the Mechanical Properties of the Carotid Artery in WKY Rats and SHR following Relaxation of Arterial Smooth Muscle Benetos, A.; Pannier, B.; Brahimi, M.; Safar, M.E.; Levy, B.I.
Histamine Responsiveness of the Various Vascular Beds of Facial and Nasal Tissues in the Dog Ban, F.; Ariwodola, J.O.; Pleschka, K.
Contraction of Small Mesenteric Arteries Induced by Micromolar Concentrations of ATP Released from Caged ATP Sjöblom-Widfeldt, N.; Arner, A.; Nilsson, H.
Cardioplegia Alters Porcine Coronary Endothelial Cell Growth and Responses to Aggregating Platelets Nilsson, F.N.; Miller, V.M.; Johnson, C.M.; Tazelaar, H.; McGregor, C.G.A.
Role of Cytochrome P-450 in Elevating Renal Vascular Tone Gebremedhin, D.; Ma, Y.H.; Imig, J.D.; Harder, D.R.; Roman, R.J.

No. 2

Research Papers
Cerebroarterial Relaxations Mediated by Nitric Oxide Derived from Endothelium and Vasodilator Nerve Toda, N.; Ayajiki, K.; Okamura, T.
Mechanism of Mastoparan-Induced EDRF Release from Pulmonary Artery Endothelial Cells Tracey, W.R.; Peach, M.J.
Mesenteric Arcade Arteries Contribute Substantially to Vascular Resistance in Conscious Rats Christensen, K.L.; Mulvany, M.J.
Angiotensin II Stimulates Increased Protein Synthesis, Not Increased DNA Synthesis, in Intact Rat Aortic Segments, in vitro Holycross, B.J.; Peach, M.J.; Owens, G.K.
Heterogeneous Distribution of $[3H]\alpha, \beta$-Methylene ATP Binding Sites in Blood Vessels Bo, X.; Burnstock, G.
Nerve-Mediated Responses of Blood Vessels in the Rabbit Knee Joint Khoshbaten, A.; Ferrell, W.R.
Inhibition of Fibroblast and Smooth Muscle Cell Proliferation and Migration in vitro by a Novel Aminochromone U-67154 Bonin, P.D.; Singh, J.P.; Gammill, R.B.; Erickson, L.A.
Effects of Protein Kinase C Activation on Intracellular Ca$^{2+}$ Distribution in Vascular Smooth Muscle Cells of Spontaneously Hypertensive Rats Neusser, M.; Golinski, P.; Zhu, Z.; Tepel, M.; Zidek, W.

Rapid Communication

Erratum

No.3

Circulatory Effects Caused by Intra-Arterial Infusion of AMP, ADP and ATP in the Canine Facial and Nasal Vascular Beds Bari, F.; Ariwodola, J.O.; Pleschka, K.
Mechanisms of Histamine-Induced Coronary Vasodilatation: Receptor-Mediated Release of Endothelium-Derived Nitric Oxide Toda, N.; Ayajiki, K.; Okamura, T.
Oxide
Kelm, M.; Feelisch, M.; Krebber, T.; Motz, W.; Sträuer, B.E.
Endothelin Receptor Regulation by Endothelin Synthesis in Vascular Smooth Muscle Cells: Effects of Dexamethasone and Phosphoramidon
Roubert, P.; Vossat, I.; Lonchampt, M.-O.; Chapelat, M.; Schulz, J.; Plas, P.; Gillard-Roubert, V.; Chabrier, P.-E.; Braquet, P.
Pulmonary Artery Endothelial Dysfunction following Ischemia and Reperfusion of the Rabbit Lung Davenpeck, K.L.; Guo, J.; Lefer, A.M.

Heparin Increases Cell Membrane-Associated Heparan Sulfate Proteoglycan in Balloon-Injured Rat Carotid Artery Mutoh, S.; Clowes, M.M.; Clowes, A.W.
Cellular Signalling by Lipoproteins in Cultured Smooth Muscle Cells from Spontaneously Hypertensive Rats Resink, T.; Rybin, V.; Bernhardt, J.; Orlov, S.; Bühler, F.R.; Tkachuk, V.A.

III
No. 4

Research Papers
Two-Dimensional Tortuosity of the Superficial Femoral Artery in Early Atherosclerosis Smedby, Ö.; Höganås, N.; Nilsson, S.; Eriksson, U.; Olsson, A.G.; Walldius, G.
Morphogenic Effects of Endothelin-1 on Vascular Smooth Muscle Cells Hahn, A.W.A.; Regenass, S.; Resink, T.J.; Kern, F.; Bühler, F.R.
Protein Kinase C Involvement in the Regulation of Angiogenesis Tsopanoglou, N.E.; Pipili-Synetos, E.; Maragoudakis, M.E.
Eicosapentaenoic Acid Potentiates the Production of Nitric Oxide Evoked by Interleukin-1β in Cultured Vascular Smooth Muscle Cells Schini, V.B.; Durante, W.; Catosky, S.; Vanhoutte, P.M.
Renal versus Femoral Hemodynamic Response to Endothelium-Derived Relaxing Factor Synthesis Inhibition Sigmon, D.H.; Carretero, O.A.; Borer, W.H.
Contractility of the Rabbit Abdominal Aorta 4 Days after Endothelium Denudation Holécyová, A.; Gerová, M.; Smieko, V.; Doležel, S.

Correspondence
Reduction of Vein Graft Intimal Hyperplasia by ex vivo Treatment with Desferrioxamine Manganese Underwood, M.J.; More, R.S.; Thompson, M.M.; Gershlick, A.H.
Reply Hagen, P.O.; Davies, M.G.; Schuman, R.W.; Murray, J.J.

No. 5

Research Papers
Angiotensin-II- and Endothelin-1-Induced Protein Phosphorylation in Cultured Vascular Smooth Muscle Cells Tsuda, T.; Griendling, K.K.; Ollerenshaw, J.D.; Lassègue, B.; Alexander, R.W.
Pressor Responses of Rat Isolated Tail Arteries to Contractile Stimulation after Methylene Blue Treatment: Effect of Adventitial versus Intimal Entry
Mazmanian, G.M.; Baudet, B.; Pannier-Poulain, C; Choudat, L.; Dulmet, E.; Perrin, A.; Weiss, M.; Hervé, Ph.

Relaxation of Isolated Coronary Arteries by Angiotensin-Converting Enzyme Inhibitors: Role of Endothelium-Derived Kinins
Hecker, M.; Bara, A.T.; Busse, R.

Interaction between Cerebrovascular Sympathetic, Parasympathetic and Sensory Nerves in Blood Flow Regulation Morita-Tsuzuki, Y.; Hardebo, J.E.; Bouskela, E.

Mediator Role of Prostaglandins in Acetylcholine-Induced Vasodilation and Control of Resting Vascular Diameter in the Hamster Cremaster Microcirculation in vivo de Wit, C; von Bismarck, P.; Pohl, U.

Myosin Heavy-Chain Isoform Composition and Distribution in Developing and Adult Human Aortic Smooth Muscle Frid, M.G.; Printesva, O.Y.; Chavegato, A.; Faggin, E; Scatena, M.; Koteliansky, V.E.; Pauletto, P.; Glukhova, M.A.; Sartore, S.

Structural Heterogeneity of the Diffuse Intimal Thickening and Correlation with Distribution of TGF-β1 Merrilees, M.J.; Beaumont, B.

Demonstration of the Alpha-Vasoconstriction-Lowering Effect of Calcium in the Pithed Rat
Puerro Vicente, M.; Aleixandre de Artiñano, M.A.

No. 6

Research Papers

Neuropeptide Y Increases Force Development through a Mechanism That Involves Calcium Entry in Resistance Arteries Andriantsitohaina, R.; Bian, K.; Stoetlet, J-C; Bukoski, R.D.

Phorbol Ester-Induced Contractions of Swine Carotid Artery Are Supported by Slowly Cycling Crossbridges Which Are Not Dependent on Calcium or Myosin Light Chain Phosphorylation Fulginiti, J. H.; Singer, H.A.; Moreland, R.S.

Phorbol Ester-Induced Contractions of Swine Carotid Artery

Dietary-Induced Atherosclerotic Lesions Have Increased Levels of Acidic FGF mRNA and Altered Cytoskeletal and Extracellular Matrix mRNA Expression Liau, G; Winkles, J.A.; Cannon, M.S.; Kuo, L.; Chillian, W.M.

Endothelin-1-Like Immunoreactivity in Postobstructive Pulmonary Vasculopathy Gaïd, A.; Stewart, D.J.; Michel, R.P.

Nitric-Oxide-Related and Non-Related Mechanisms in the Acetylcholine-Evoked Relaxations in Cat Femoral Arteries Alonso, M.J.; Salaices, M.; Sánchez-Ferrer, C.F.; Ponte, A.; López-Rico, M.; Marin, J.

Endothelium of Human Umbilical Blood Vessels: Ultrastructural Immunolocalization of Neuropeptides Cai, W.-Q.; Bodin, P.; Loesch, A.; Sexton, A.; Burnstock, G.

Correspondence

Editorial Comment Mulvany, M.J.

Microcirculation in Leading Research Centres of the Former Soviet Union Mchedlishvili, G.